King County Asthma Forum

Section 4 - Improving childcare management

(Updated through March 2004)

Objective: **Improved clinic practices around asthma control**

Strategic Area: **Improving clinical management**

Description

Actual clinical practice often deviates from recommended clinical practice guidelines and evidence-based asthma management practice. Allies Against Asthma is carrying out a number of activities in clinics to bring actual practice closer to best practice. Clinics that have participated fully in these activities include Sea Mar Community Health Center, Rainier Beach Medical Center, Columbia Public Health Center, and Roxbury Family Healthcare-Highline Medical Group. The Eastside Community Health Clinic was participating fully but dropped out. Harborview Pediatric Clinic was recently recruited for involvement in partial activities, and the North Public Health Center has participated in some activities.

Learning Collaborative:

The primary strategy used by AAA to improve asthma care was based on an adaptation of the Learning Collaborative approach developed by the Institute for Health Care Improvement (http://www.ihi.org/) The goal of this Collaborative is to improve the quality of care delivered to children with asthma in an evidence-based manner through a collective learning process and technical assistance. Clinics assess current quality of care, identify areas for improvement and implement system-level improvements that focus on assuring the delivery of evidence-based clinical care and the provision of strong support for family education and self-management. A second goal is to enhance the linkages between clinical care for people with asthma and supportive resources and systems in the community, such as community health workers, education programs for families, childcare sites and schools, and neighborhood asthma committees.

The Collaborative uses three "models" to generate learning and improvement: the Chronic Care Model, the Model for Improvement, and the Collaborative Learning Model. The Chronic Care Model, developed by Wagner and colleagues[1,2] provides a framework for quality improvement efforts. Implementation of the Chronic Care Model is being promoted by application of the rapid cycle plan-do-study-act (PDSA) approach developed by the Institute for Healthcare Improvement [3,4,5] supported by expert consultation and cross-clinic interaction**.** The Learning Model is a 12-15 month schedule of intensive learning in a collaborative setting interspersed with action periods in the health center setting. This Collaborative modified the models in some significant ways in order to adapt them to the local context. For example, in applying the model to a specific geographic region, clinics were recruited at varying levels of readiness in order to include key providers of services to the residents of the AAA intervention area. There have also been many fewer resources than is typical for implementation.

Four clinics are using the PDSA approach to improve the quality of asthma care. They are all at different stages of applying these models. Three of the clinics have made modest improvements. They have formed improvement teams with active clinical champions, are actively testing changes, are using asthma registries and are beginning to spread improvements to other provider practices in their clinics. AAA is

---

[1] Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. JAMA. 2002;288:1775-9.

[2] Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model. JAMA. 2002;288:1909-14.

[3] Wagner EH, Glasgow R, Davies C, Bonomi AE, McCulloch D, Provost L, Carver P. Quality improvement in diabetes care: A collaborative approach. Joint Commission on Quality 2001;27:63-80.

[4] www.ihi.org

[5] Langley G, Nolan K, Nolan T, Norman C, Provost L. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. San Francisco, CA: Jossey-Bass Publishers; 1996.

supporting 0.15 FTE of a clinician-leader's time at each site to serve as the clinic asthma champion. The champion leads a team effort to implement the PDSA process and incorporate improved practices into clinic operations. Asthma champions receive technical support from the AAA Asthma Management Coordinator (AMC) and an asthma management consultant.

Learning among and from other teams and peers in the collaborative is a powerful factor in achieving results and spreading improvement to others. Clinics participate in regular bi-monthly gatherings for the purpose of learning about best practices and how to implement the improvement model, sharing their experiences, and learning from each other. They also maintain contact with each other through a listserv (periodic conference calls were recently discontinued). Technical assistance is provided through site visits. Each month, clinics report on improvement activities and measures of quality of care (see below). These reports are shared among participating clinics.

Asthma Registry:
A critical tool in providing excellent care for chronic diseases is a clinical tracking system. AAA is supporting development of an asthma registry at five sites and the City of Seattle at one site through provision of computers, software, technical assistance and funding of a 0.1 FTE registry manager (who enters data, prepares reports and adds registry data to clinical charts).

The registry collects data on components of care (such as severity assessments, use of inhaled steroids, and use of asthma action plans) and outcomes of care (number of symptom days) specified by current guidelines and/or desired by clinicians. The system uses the data to prepare patient management summaries for each clinic visit, which are then updated after the visit. These summaries permit assessment as to whether care is in conformance with guidelines. The registry also describes adherence to guidelines for the entire clinic population of patients with asthma in order to facilitate identification of targets for quality improvement. Registry data also serves as a source of evaluation data for the AAA program.

Other Activities:
AAA Community Health Workers (CHWs) assist clinicians in improving care for children with asthma by providing care coordination services with community resources, case management, coaching of clients in provider-patient communication and support for self-management. As patients learn appropriate self-management skills they are more enabled to request appropriate assistance from their providers.

AAA has assisted 5 clinics in implementing pulmonary function testing (spirometry) by providing resources and training. Spirometry is an important tool for accurately assessing asthma severity and for diagnosing asthma.

In 2003 the Community Health Plan of Washington (CPHW) partnered with an organization of community health centers and KCAF to improve clinic-based asthma care for patients served by health plan enrollees cared for by network providers. The catalyst was the health plan's performance on the HEDIS asthma measure regarding controller medication treatment for patients with persistent asthma. This project takes a broader view to understand and act upon what prevents optimal care. It is anticipated that improvements resulting from this project will extend to patients in clinics participating in the Learning Collaborative.

During 2003 the KCAF began exploring methods for providing resources and education that were effective but did not require the efforts of a full-blown Learning Collaborative. They conducted an assessment of healthcare providers attending the Asthma Educator Institute (AEI) to identify asthma training needs and interests. The information will be used to help shape future clinical interventions.

<u>Progress</u>
The primary process measures for the clinical intervention involve the development and implementation of the Learning Collaborative and implementation of clinic improvements shown below.

Process Measures

Process objective	*Status/Indicators*	*Next Steps*
Teams are established to engage in quality improvement activities	• 5 teams originally, one stopped participating • Individual clinic team meeting frequency: weekly • Collaborative (i.e., all clinics) meeting frequency: quarterly	Teams continue activities at current sites
Clinic Asthma Champions are in place	• 4 Asthma Champions	Continue support for asthma champions
Registries are in place and in use	• 4 clinics are using registries • 1 additional clinic added a registry and some QI activities	• Continue to work on the many issues related to implementing the registry in all clinics • Increase number of patients in registry • Expand scope and utilization of registry reports • Continue spread of registry use to additional providers
Clinic staff are conducting improvements	• Description of changes successfully implemented: teams are "spreading" QI activities within their clinics; teams are linking asthma patients to AAA CHWs /other community resources and KCAF projects; spirometry use is increasing; health educators were trained in asthma education and are working with patients; developed a tool box for asthma education; means to provide insurance being facilitated; NAEPP severity guidelines were posted to standardize provider classification; registry forms and identifying stickers are affixed to charts; community awareness events are being held at clinics; standard asthma care plans and forms implemented; more well- and planned-care visits are being scheduled; regular chart reviews to generate suggested are	Continue PDSA cycles

	improvements are occurring	
Learning Sessions and didactic team get-togethers are held	• 2 learning sessions followed by bi-monthly team get-togethers • Avg. attendance: 16	Continue team get-togethers
Communication methods are in place	• Listserv established and in use • Monthly conference calls held through June 03 but were discontinued • Bi-monthly all-team meetings occurring • AMC coached over 40 providers from other clinics with CHW clients on asthma care practices	
Health care provider coaching and assessment project is implemented	• Assessment completed at 3 sites • # educational, coaching and other supporting activities held	Waiting for data

Clinical Process and Outcome Measures

Clinic measures and goals are organized around improvements and changes in clinic practices. They focus on three clinical process measures and one clinical outcome measure selected by Collaborative participants. The primary clinical process measures pertain to all childhood asthma visits in a given month and are:

1. Percent of visits in which an asthma severity classification was made (goal: 95%)
2. Percent of visits for children with persistent asthma where anti-inflammatory treatments are prescribed or noted (goal: 95%)
3. Percent of visits for children with persistent asthma where a current written asthma action plan is noted (goal: 95%)

The clinical outcome measure pertains to all children with persistent asthma seen in one month and is the number of symptom-free days in the two-week period preceding the visit (goal: 12 or more symptom-free days in a two-week period).

Clinical Focus[6]	***Measures***	***Goal***	***Next Steps***
Asthma severity classification at all asthma visits	• % of childhood asthma visits in which an asthma severity classification has been made: **92%**	95%	COL: 84.9% (n=53) Roxbury: 87.5% (n=24) SeaMar: 100% (n=2)

[6] Data are currently available from one clinic

Anti-inflammatory treatment for children with persistent asthma is prescribed or noted at all asthma visits	• % of visits for children with persistent asthma where anti-inflammatory treatment is prescribed or noted: **78%**	95%	COL: 92.3% (n=26) Roxbury: 18.2% (n=11) Sea Mar: 100% (n=2)
Use of current written asthma action plan for children with persistent asthma	• % of visits for children with persistent asthma where a current action plan is noted: **74%**	95%	COL: 50.0% (n=26) Roxbury: 0 (n=11) Sea Mar: 50.0% (n=2)
Symptom-free days in children with persistent asthma	• # of symptom free days in the two week period preceding the visit: **7.3**	12 or more symptom-free easy in a two-week period	COL: 8.3 days (n=21) Roxbury: 5.3 (n=10) Sea Mar: 12.0 (n=2)

Successes:

- **Able to recruit participation of majority of safety net providers** in the AAA intervention area.
- **Carried out two learning sessions** and quarterly team get-togethers, monthly conference calls were established, and a listserv was developed to promote information exchange.
- **Clinic staff knowledge** and awareness have increased**.**
- **Asthma champions** are actively engaged at all sites.
- **Communication and networking** developed among clinics.
- **Registry development -** significant progress has been made in resolving both content and format problems with the encounter form to make the registry a useful tool for providers.
- **Some improvements in clinic flow have occurred** such as dividing paperwork responsibilities so that providers have more time to spend directly with patients and increasing the number of patients receiving spirometry testing. Other flow improvements have allowed for assessing patient knowledge, establishing routine measures for asthma, incorporating patient education into the visit, and developing forms that are more useful.
- **Training in spirometry** was accomplished and spirometry use has increased.
- **Participating clinics all plan to continue improvement and collaborative efforts through 2004.** The initial plan for the Collaborative was for it to conclude after 15 months. The clinics desire to extend the work through 2004 as they observe that they are just now developing the capacity to fully engage in improvement work.
- **Over time, senior leadership was obtained.** This took time and commitment but was critical to the continued growth and evolution of QI activities.
- **One clinic not formally participating in the full Learning Collaborative** has implemented a registry and some limited QI activities.
- **Links between community resources and providers are being established.**

Challenges:

- More clarity was needed about roles, responsibilities, **and purpose of the collaborative.**
- **There were not enough resources** (either time or expertise) to carry out a thorough planning process or to implement the LC as designed.
- **Expectations were too high** about what a Learning Collaborative experience could be relative to the level of resources available.

- **The asthma registry needed to be in place** prior to implementing the collaborative so that data could be available for the PDSA cycles.
- **One clinic dropped out**.
- **Clinics have limited staff and financial resources and are pressured to focus on reimbursable activities.** It is difficult for them to justify allocating time towards the planning and meeting time required by this intervention.

Lessons Learned:

- **Be flexible and modify the standard collaborative model** to fit with the resources available and local context.
- **Provide adequate resources** including leadership, staff time, and expertise.
- **Clearly communicate the purpose of the project** and roles/responsibilities to all participants, including clinic staff and leadership.
- **Have the registry up and running** prior to starting the learning collaborative.
- **Have a strong project leadership team in place.**
- **Engage senior clinic leaders often and regularly in collaborative activities.**
- **Use terminology that accurately describes the activities** so that false expectations and misunderstandings do not occur.
- **Offer tangible services to participating clinics** such as training or spirometers.
- **Have more teams participate** so that the potential for collaborative learning among teams and cross-clinic interaction can occur more readily.